

Restoration (FINAL)

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APP # 700581

A. List of Restoration Activities

The San Bernardino National Forest Association (SBNFA) is the primary non-profit partner to the San Bernardino National Forest (SBNF), assisting in forest restoration, volunteer coordination and environmental education. The SBNFA has supported restoration projects of the SBNF for 17 years through volunteer support. The SBNFA hosts an OHV volunteer program and the Children's Forest/Urban Conservation Corps youth volunteer program, which provide volunteer support for ecological monitoring, tree planting, native plant propagation, and watering/maintaining past planting projects. Over 65,000 hours are contributed annually to the SBNF to maintain the forest as of 2009. Over 5 million people visit the SBNF annually, making this forest both the most visited and most impacted National Forest.

With the newly created Urban Conservation Corps, the capacity and scope of this project has been greatly increased to reflect the tremendous increase in volunteers and staffing. Two Major project components are incorporated into this grant request, conducted over 3 years.

1. To Coordinate and Manage a Greenhouse and outdoor native plant Nursery Operation for Planting and Seeding Unauthorized and Decommissioned OHV Routes

The proposed project will coordinate and manage a greenhouse operation for seeding and planting native species to treat off route impacts and support restoration in areas impacted by unauthorized OHV routes. The SBNFA operates and manages a greenhouse on the Mountaintop Ranger District. The greenhouse is managed by the program coordinator/volunteers and can provide plants and seeds for restoration work on unauthorized routes within the Mountaintop and Front Country Ranger Districts. Under this proposed project, youth from the Children's Forest/Youth Corps will help manage the greenhouse for restoration work. Youth volunteers will execute all of the volunteer work under the direction of staff.

Deliverables:

- Propagation of up to 2000 native species plants per year
- Collection, cleaning, and storage of native species seeds
- Successful germination and greenhouse care best practices
- Develop a successful seed ball program for direct seeding sites without causing ground disturbance
- Provide 8 volunteer work days/month with volunteers

2. To Assist the San Bernardino National Forest in restoring current, decommissioned, and illegal OHV areas

The proposed project will work directly with biologists and botanists from the SBNF to increase capacity of restoring OHV areas. Area covers past and upcoming restoration projects in support of the SBNF ecological restoration program, including 55 miles of decommissioned OHV Roads in the Holcomb Valley area, 32 miles of unauthorized off highway vehicle trails in the following areas: Baldy Mesa, Cactus Flats, Circle Mountain, Air Curtain Destructor Site, Big Pine Flats and Holcomb Valley. The SBNFA will assist the Forest Service by providing a full complement of staff and volunteer support to increase the capacity of work done, which will greatly accelerate the restoration process. Field work can be conducted year round at a minimum of 8 work days/month. Field days will each be dictated by the SBNF Project Director, who will ensure all areas and methods are within approved US Forest Service policy with all environmental regulations met. Field work to be conducted includes: slashing, vertical mulching, planting, weeding, watering, removing invasive weeds, trash collection, caging plants, monitoring, and recording success rate data.

Deliverables:

- Work 20 days/year at the Cactus Flats OHV Staging Area to replant, fence, and control OHV activity
- Work 20 days/year at the Holcomb Valley Road Decommissioning project (55 miles)

- Work 8 days/year at Air Curtain Destructor Site: monitoring, watering, supplemental planting, weeding
- Work 8 days/year at Circle Mountain, including 15 miles of unauthorized routes: planting, seed collection, seeding, vertical mulching, weed removal
- Work 8 days/year at Baldy Mesa, including 17 miles of unauthorized routes: fencing, seeding, planting, seed collection, vertical mulching
- Work 8 days/year at Big Pine Flat Meadow Project: collecting willow and replanting cloned species

Maps of the Circle Mountain and Baldy mesa Projects are available in this proposal, see attached. Maps of the Mountaintop Ranger District (Holcomb Valley, Cactus Flats, Big Pine Flats, ACD) are included as part of the San Bernardino National Forest Grant Application for the SBNF Road Decommissioning Project.

All work done in this grant request is done under the Land Managers (San Bernardino National Forest) Habitat Management Plan, which can also be found on the SBNF Grant Application.

B. Describe how the proposed Project relates to OHV Recreation and how OHV Recreation caused the damage:

OHV recreation is an incredibly popular activity on the San Bernardino National Forest. The SBNFA hosts an Education and Outreach program that hosts patrols, information fairs, classroom activities, and seminars about the importance of sustainable OHV recreation. However, unauthorized OHV recreation continues to take place on the SBNF, with many miles of trails impacting several habitats and 140 threatened, endangered, and sensitive species. It is imperative to restore these trails by slashing, building fence, planting, watering, monitoring, and patrolling these unauthorized trails and recently decommissioned trails.

According to the U.S. Forest Service (2009), the San Bernardino National Forest has one of the highest concentrations of Threatened, Endangered and Sensitive (TES) species in the Country that are in direct conflict with one of the highest concentrations of Illegal OHV recreation. At the same time, it hosts an increasing number of unauthorized illegal routes throughout these habitats. In 2009, Law Enforcement Officials from the San Bernardino National Forest stated that illegal routes throughout the National Forest have become a "lawless" condition (2009). According to the Forest Service, most all of these illegal routes within (TES) areas have been created by off route travel from motorcycles, ATVs and visitors that hike off the legal trails. Officials have reported that many visitors hike off legal trails due to trail erosion and soil loss that make legal trails not visible or appear to be not safe for travelers. Notwithstanding, all of these conditions leave the (TES) areas vulnerable to continuous off route travel trespass.

According to the U.S. Forest Service Environmental Assessment Plan (2008), over 80 miles of unauthorized routes both on the Mountaintop and Front Country Ranger Districts have disturbances due to unauthorized routes. The unauthorized routes are in immediate need of permanent physical restoration and measures to mitigate this problem. Without permanent physical restoration and other mitigation measures, impacts to these (TES) areas are almost certain to continue.

On the SBNF, 32 miles of trail on the Mountaintop and Front Country Ranger Districts have been restored recently, in the areas of Baldy Mesa, Cactus Flats, Air Curtain Destructor Site, Big Pine Flats and Holcomb Valley. Restoration of these projects has included staffing hours, and has included critical volunteer efforts to reduce costs and increase advocacy for stewardship of public lands. In order for the SBNF to be fully successful maintaining and monitoring these restored trails, partnerships with volunteer-based organizations such as the SBNFA are necessary. In these areas, funding is sought to assist the SBNF with staff and volunteer support to replant, monitor, collect, seed, water, remove weeds and garbage, vertical mulch, and collect data on the unauthorized OHV routes.

In addition, over 55 miles of Roads are currently being decommissioned in the Mountaintop Ranger District of the San Bernardino National Forest in the Holcomb Valley areas. This decommissioning will be complete as of September, 2010, at which time major restoration efforts will take place to rehabilitate these roads back to native forest habitat. Activities will include planting, removing invasive weeds, collecting trash, seeding, seed collection, watering, monitoring, data collection, and caging plants to prevent herbivory.

To fully support the project, a satellite greenhouse and tree nursery will be maintained at the Children's Forest where plants will be grown by volunteers (overseen by staff). Included in this process is to clean, store, and propagate seeds of native

species for each restoration area. Native bunch grasses will be grown in the outdoor bare-root beds for annual planting. Lastly, volunteers will work with local school children to develop a successful "seed ball" program, a clay-based seeding method for low-impact restoration work.

Volunteers will be recruited, trained and transported by SBNFA staff. This service conducted by volunteers will assist the SBNF ecological restoration program. Involving volunteers is critical, by creating advocates for the forest. Volunteers who assist in ecological restoration and monitoring have a more vested interest in protecting the forest, while learning about the impact of unauthorized use. Over one third of all 750 volunteers that the SBNFA manages are OHV users, both recreationally and in a volunteer work situation. The opportunity to positively impact these 87 miles of trails while directly involving OHV users will have a far greater impact as each volunteer becomes an advocate and teacher to other OHV users.

C. Describe the size of the specific Project Area(s) in acres and/or miles

This project will encompass restoration of 55 miles of Decommissioned OHV roads on the Mountain Ranger District (Holcomb Valley) and 32 miles of monitoring and maintenance on the Front Country Ranger District. Both Ranger Districts are part of the San Bernardino National Forest. The combined 87 miles of project area is determined and overseen by the Project Director of the land manager, the San Bernardino National Forest. In addition, the Habitat Management Plan is developed and managed by the land manager. All restoration activities operate under the direction of the Project Director of the San Bernardino National Forest Ecological Restoration Monitoring program.

D. Monitoring and Methodology

Restoration activities have been planned in conjunction with biologists from the SBNF to ensure proper methodology is followed and restoration of specific areas are completed. To ensure a high degree of success, all restoration events involving volunteers from the community are presented with an introduction to the ecology of the area, a thorough safety discussion with safety materials provided, and demonstrations of proper techniques. All volunteers are led in groups of 10 with a supervisor, either a staff member or trained volunteer supervisor. Methods and safety considerations are pre-approved by the SBNF District Ranger, following best practices as well as regulations. All areas to be planted have been approved through the NEPA process, ensuring the project achieves the overall sustainability goals for the forest.

Methodology: Seed collection

Each species grown is collected from seed at a specific site and elevation, to be returned to a nearby location for restoration activities. On each project, seed is collected on-site to bulk the storage and increase capacity. In a given region, no more than 10% of any species is collected from that area. Collection methods vary, depending on the species; however the host plant is never destroyed. Of each plant collected, only 10% of the seeds are taken to maintain genetic diversity on the forest as well as in the sample collected. Samples are collected in paper bags, which are labeled with species, elevation, location, and date. Back at the Greenhouse facility, seeds are cleaned of their hulls and stored dry in a refrigerator, with silica desiccant as needed.

Methodology: Seed Germination

After storage, seeds are removed for germination. Germination methods include direct seeding, scarification, cold storage, acid bath, and rooting of cuttings. Youth volunteers are given the opportunity to devise germination practices through scientific reasoning, experimenting with soil mixtures, density, water, temperature and light. Seed treatments are determined both by the PI and through proven methods, as referenced by printed literature. Established success factors are determined by the Project Director of the SBNF, and deviations are carefully recorded and monitored.

Methodology: Transplanting

Successful seedlings are grown in seed flats for approximately three months until transplanted into bullet pots, which can hold a seedling for six months to one year. After the roots have outgrown the bullet pot, the seedling is either planted in the forest, or transplanted into larger 1-gallon pots, to be planted in the forest next season. The soil used for transplanting closely mirrors the soil composition of the forest, largely decomposed granite, by mixing, by volume, 49% sand with 49% organic topsoil, with 2% perlite mixed in. Upon transplanting, seedlings are given 2 grams of Vitamin B-1 to reduce shock to the roots. For each forest planting, it is optimal to plant 50% first-year seedlings and 50% second-year seedlings. First-

year seedlings can also be transplanted into the outdoor seed beds, as space allows. This is successful with the ponderosa pine and pinyon pine species, which can better withstand the winter temperatures than some of the more sensitive shrubs and flowering bushes often used for restoration activities.

Methodology: Seed Ball Experiment

This is a new component based on a Japanese seeding method, creating 1" – 2" diameter balls composed of clay, organic soil, and seed. According to the Wildlife Research Institute, working at an adjacent National Forest in Southern California, "seed balls are utilized to revegetate areas with a dry climate where rainfall is minimal and unpredictable. Seeds are encased in a ball of clay and compost. The clay protects the seeds from the drying sun, wind, rodents, birds, and insects. When the rainy season begins, the water permeates the clay allowing the seeds to germinate while the compost provides nutrients for the emergent seedlings. This revegetation method is efficient, requiring no maintenance and allows the seeds to sprout in an optimal environment."

In winter 2007, this was experimented with on the SBNF with little success, as the clay did not decompose. Youth in the Children's Forest volunteer program will be testing different clay:compost mixtures to determine the right mix for a given area, which will vary depending on location as rainfall can vary dramatically. Experimentation with known viable seeds will take place in fall, with seeding to take place in winter. This process is two-fold. One component involves placing seed balls in radial transects with photos and coordinates taken. The second component involves distribution by dropping seed balls, while walking, every 3 feet. Monthly monitoring will take place to determine success. Upon determining successful methods, local school classrooms will be provided with materials to make seed balls to direct seed 55 miles of decommissioned Off-Highway Vehicle dirt roads on the SBNF.

Methodology: Grass Seed Beds

New for 2010 is the utilization of six seed beds for growing native bunch grasses for fast, effective restoration and erosion control. The six beds can hold several thousand "bunches" of grasses, primarily *Bromus carinatus* and *Elymus elymoides* which are two excellent native species for rapid restoration on barren slopes. Once grown, (3 months), the grasses will go to seed, which will be collected; then the grass will be planted throughout summer 2011. Once the beds are tilled, the seeds will be replanted and grown out for another season, creating an ongoing supply of restoration species.

Methodology: Planting

Planting projects take place from April through November, or until the ground freezes, and are facilitated by project staff and youth and community volunteers. Plants from the greenhouse are prepared by trimming the green tops to reduce the water requirements, and then brought to a restoration site. Planting sites are prepared by using either a gas-powered auger (when appropriate), or with post-hole diggers, and planting methods are demonstrated to volunteers. No amendments are used in the soil. After planting, the base of trees and shrubs are covered with on-site mulch and are then covered with a biodegradable herbivory cage to prevent grazing from mule deer and rodents. Herbivory cages are typically removed after 3 years and can be reused. The last step in the planting process is to vertical mulch the site by placing branches, rocks, and other barriers to prevent illegal Off-Highway vehicle use.

Methodology: Trail Maintenance:

(a) Brushing, Clearing and Grubbing: Volunteers will coordinate a hand crew that will clear brush and remove stumps from trail beds and will remove live and dead timber. The OHV volunteers will also establish clearing limits as specified by Forest Service Standards and Guidelines for OHV trails. Brush is cut back on corners to insure adequate sight visibility thru the turn for rider safety. Cut brush is hauled to areas of light vegetation growth and scattered so that piles are not created, or is used to disguise unauthorized routes to discourage further use.

(b) Hazard or Danger Tree Removal: Volunteers will work on bucking and limbing trees and scattering slash. Trees and snags that are broken off, leaning or are in an unstable position over the trail will be removed so that visitors will use the trails oppose to going off route.

(c) Conservation: The primary purpose of the trail conservation work under the OHV Trail Maintenance Program is to mitigate the impacts associated with OHV use off of designated routes. Other conservation work activities under the OHV Trail Maintenance Program will include raking, slashing, and otherwise disguising off-route impacts to discourage continued use which may result in the creation of an unauthorized 'route'. Other activities will include 'cleaning out' rolling dips and

lead-off ditches to mitigate erosion and soil loss.

Monitoring:

Regular monitoring and maintenance is imperative for high species survival. Under ideal conditions, 95% survival rates are typical. Sites are monitored for three years from planting day. This includes data collection for mortality, general health, damage/disease, or external factors such as vehicle damage. In addition, plants are weeded to one foot perimeter to remove competitive species. Lastly, each plant is watered twice monthly during the summer and fall when rainfall is minimal and temperatures are high. Watering is conducted by volunteers who join staff with a 300-gallon watering tank, and buckets are used to water each plant approximately ½ gallon of water. Monitoring for disturbance will be critical, to ensure OHV and other users are not violating road closures; keeping all users off the restored land is critical for success. OHV Safety and Education volunteers will be station at key closures when possible to ensure the closures are respected.

Analysis:

Analysis for this project is basic, adjusting practices when necessary. A major analysis tool is determining survival rates. In the greenhouse, survival rates are determined for each following activities: % success in germination, % success transplanting, and % survival after 1 year. For planting, survival rates are taken for 3 years, with other monitoring data as mentioned for a general health indicator. The analysis for the seed balls, as a new project, is largely unknown and this will be observation based, as a successful mixture is found it will be replicated. If successful, this method could be a critical technique for the SBNF restoration process and can exponentially increase the amount of plants on a restoration site very quickly. Lastly, Activity Tracking forms will be utilized for staff to determine the effectiveness of each project and track the work completed by location.

E. List of Reports

N/A

F. Goals, Objectives and Methodology / Peer Reviews

N/A

G. Plan for Protection of Restored Area

All restoration work to be completed in the 55 miles of Decommissioned Roads will be protected by physical barriers. As part of the decommissioning process, large rocks will be placed as physical barriers so that motorized recreationists are unable to trespass. The rock is locally sourced so that it fits with the natural landscape. In addition, vertical mulching will take place in the form of sticks, logs, and other natural debris to protect the area.

For all restoration sites, Law Enforcement on the SBNF will be alerted to each area for routine monitoring. In addition, three full-time OHV staff members of the SBNF perform routine patrols and monitoring which will include protecting the areas. Volunteers within the OHV Safety and Education volunteer program will be stationed at key access areas to ensure the closures are honored.

Additional Documentation

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1. Project-Specific Maps

Attachments:

[Map Including Restoration Sites](#)

[Baldy Mesa](#)

[Circle Mountain](#)

2. Project-Specific Photos

Attachments:

[Baldy Mesa](#)

[Baldy Mesa - Slash](#)

[Air Curtain Destructor](#)

Project Cost Estimate

FOR OFFICE USE ONLY:				Version # _____	APP # _____
APPLICANT NAME :	San Bernardino National Forest Association				
PROJECT TITLE :	Restoration (FINAL)			PROJECT NUMBER (Division use only) :	G09-04-02-R01
PROJECT TYPE :	<input type="checkbox"/> Acquisition <input type="checkbox"/> Development <input type="checkbox"/> Education & Safety <input type="checkbox"/> Ground Operations <input type="checkbox"/> Law Enforcement <input type="checkbox"/> Planning <input checked="" type="checkbox"/> Restoration				
PROJECT DESCRIPTION :	<p>The San Bernardino National Forest Association (SBNFA) is the primary non-profit partner to the San Bernardino National Forest (SBNF), assisting in forest restoration, volunteer coordination and environmental education. The SBNFA has supported restoration projects of the SBNF for 17 years through volunteer support. The SBNFA hosts an OHV volunteer program and the Children's Forest/Urban Conservation Corps youth volunteer program, which provide volunteer support for ecological monitoring, tree planting, native plant propagation, and watering/maintaining past planting projects. Over 65,000 hours are contributed annually to the SBNF to maintain the forest as of 2009. Over 5 million people visit the SBNF annually, making this forest both the most visited and most impacted National Forest.</p> <p>With the newly created Urban Conservation Corps, the capacity and scope of this project has been greatly increased to reflect the tremendous increase in volunteers and staffing. Two Major project components are incorporated into this grant request, conducted over 3 years.</p> <p>1. To Coordinate and Manage a Greenhouse and outdoor native plant Nursery Operation for Planting and Seeding Unauthorized and Decommissioned OHV Routes</p> <p>The proposed project will coordinate and manage a greenhouse operation for seeding and planting native species to treat off route impacts and support restoration in areas impacted by unauthorized OHV routes. The SBNFA operates and manages a greenhouse on the Mountaintop Ranger District. The greenhouse is managed by the program coordinator/volunteers and can provide plants and seeds for restoration work on unauthorized routes within the Mountaintop and Front Country Ranger Districts. Under this proposed project, youth from the Children's Forest/Youth Corps will help manage the greenhouse for restoration work. Youth volunteers will execute all of the volunteer work under the direction of staff.</p> <p>Deliverables:</p> <ul style="list-style-type: none"> • Propagation of up to 2000 native species plants per year • Collection, cleaning, and storage of native species seeds • Successful germination and greenhouse care best practices • Develop a successful seed ball program for direct seeding sites without causing ground disturbance • Provide 8 volunteer work days/month with volunteers <p>2. To Assist the San Bernardino National Forest in restoring current, decommissioned, and illegal OHV areas</p> <p>The proposed project will work directly with biologists and botanists from the SBNF to increase capacity of restoring OHV areas. Area covers past and upcoming restoration projects in support of the SBNF ecological restoration program, including 55 miles of decommissioned OHV Roads in the Holcomb Valley area, 32 miles of unauthorized off highway vehicle trails in the following areas: Baldy Mesa, Cactus Flats, Circle Mountain, Air Curtain Destructor Site, Big Pine Flats and Holcomb Valley. The SBNFA will assist the Forest Service by providing a full complement of staff and volunteer support to</p>				

Project Cost Estimate for Grants and Cooperative Agreements Program - 2009/2010
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	<p>increase the capacity of work done, which will greatly accelerate the restoration process. Field work can be conducted year round at a minimum of 8 work days/month. Field days will each be dictated by the SBNF Project Director, who will ensure all areas and methods are within approved US Forest Service policy with all environmental regulations met. Field work to be conducted includes: slashing, vertical mulching, planting, weeding, watering, removing invasive weeds, trash collection, caging plants, monitoring, and recording success rate data.</p> <p>Deliverables:</p> <ul style="list-style-type: none"> • Work 20 days/year at the Cactus Flats OHV Staging Area to replant, fence, and control OHV activity • Work 20 days/year at the Holcomb Valley Road Decommissioning project (55 miles) • Work 8 days/year at Air Curtain Destructor Site: monitoring, watering, supplemental planting, weeding • Work 8 days/year at Circle Mountain, including 15 miles of unauthorized routes: planting, seed collection, seeding, vertical mulching, weed removal • Work 8 days/year at Baldy Mesa, including 17 miles of unauthorized routes: fencing, seeding, planting, seed collection, vertical mulching • Work 8 days/year at Big Pine Flat Meadow Project: collecting willow and replanting cloned species <p>Maps of the Circle Mountain and Baldy mesa Projects are available in this proposal, see attached. Maps of the Mountaintop Ranger District (Holcomb Valley, Cactus Flats, Big Pine Flats, ACD) are included as part of the San Bernardino National Forest Grant Application for the SBNF Road Decommissioning Project.</p> <p>All work done in this grant request is done under the Land Managers (San Bernardino National Forest) Habitat Management Plan, which can also be found on the SBNF Grant Application.</p>
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	Line Item	Qty	Rate	UOM	Grant Request	Match	Total
DIRECT EXPENSES							
Program Expenses							
1	Staff						
	Other-Program Manager Notes : One individual will be paid \$35,000 per year for a 3-year period under this grant request. Program Manager is responsible for working with Land Manager to ensure adherence to HMP and NEPA, design and implement daily and annual work projects, supervise volunteers, develop Best Practices for greenhouse and Nursery, day to day maintenance of greenhouse/nursery, maintain quality of work done on site.	3.000	35000.000	YR	105,000.00	0.00	105,000.00
	Other-Program/Volunteer Coordinator Notes : The program Coordinator will be paid \$28,000 per year for a 3-year time period. Program Coordinator is responsible for recruiting and training	3.000	28000.000	FTE	84,000.00	0.00	84,000.00

Project Cost Estimate for Grants and Cooperative Agreements Program - 2009/2010
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	Line Item	Qty	Rate	UOM	Grant Request	Match	Total
	volunteers, transporting volunteers, supervision of volunteers, oand daily greenhouse and Nursery Maintenance						
	Other-Seasonal Interns Notes : 3 Seasonal Interns: matched with \$2,500 each in USFS Adventure Pass Money. This will pay for 1 intern per summer, which is the busiest time of year for restoration priojects. Intern will help with tools, plants, day to day care of greenhouse/nursery, and supervising volunteers.	3.000	5000.000	EA	7,500.00	7,500.00	15,000.00
	Other-Volunteer Hours Notes : Resoration Volunteers from Urban Conservation Corps and Children's Forest Youth Volunteer Programs: 20,000 hours per year for 3 years = 60,000 volunteer hours. Matched rate is at \$19.04 which is the rate for the SBNFA Conservation Corps match. This value is \$380,000 per year for 3 years, totalling \$1,142,400	60000.00 0	19.040	HRS	0.00	1,142,400.00	1,142,400.00
	Total for Staff				196,500.00	1,149,900.00	1,346,400.00
2	Contracts						
3	Materials / Supplies						
	Other-Greenhouse supplies Notes : Soil, soil amendment, pots, potting supplies, hoses, irrigation, benches/racks, shade structure repair	3.000	2000.000	YR	6,000.00	0.00	6,000.00
	Other-Field Uniforms Notes : Cost for Uniforms is \$2,000/year. This cost is recurring annually becuse new corpsmembers and Children's Forest volunteers will sign up for the project and require uniforms. Uniforms include: Shirt, gloves, and helmet.	3.000	2000.000	YR	6,000.00	0.00	6,000.00
	Other-First-Aid Kits Notes : 6 First Aid kits are needed for work crews: One for the Greenhous and 5 for the field. On volunteer projects, volunteers	6.000	25.000	EA	150.00	0.00	150.00

Project Cost Estimate for Grants and Cooperative Agreements Program - 2009/2010
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	Line Item	Qty	Rate	UOM	Grant Request	Match	Total
	work 1:10 ratio to a supervisor (can be a volunteer supervisor) and are up tp 30min walking distance from each other. 5 1st Aid Kits are requested for up to 5 supervisors per day.						
	Other-Field Radios Notes : Field Radions are necessary for sfety purposes. With up to 5 sererate groups in the field per day at 30min walking distance, 5 VHF radios are needed to communicate safety information. High-quality radios are necessary due to the mountainous terrain.	5.000	250.000	EA	1,250.00	0.00	1,250.00
	Total for Materials / Supplies				13,400.00	0.00	13,400.00
4	Equipment Use Expenses						
	Other-Mileage Notes : Both the progarm manager and Program Coordinator need to drive personal vehicles from the office to field location, although not daily. Combined, approximately 4,000 miles are driven annually for a total of 12,000 miles over the 3-year grant persion. The mileage is calculated at \$.50/mile at the current government rate for a total of \$6,000 requested for mileage reimbursement.	12000.00 0	0.500	MI	6,000.00	0.00	6,000.00
	Other-Fuel: 14-pass volunteer vans Notes : Fuel for 14-passenger van for transporting youth volunteers to restoration projects totals \$7,500 per year; for 3 years this equals \$22,500.	3.000	7500.000	YR	22,500.00	0.00	22,500.00
	Total for Equipment Use Expenses				28,500.00	0.00	28,500.00
5	Equipment Purchases						
6	Others						
7	Indirect Costs						
	Indirect Costs-Indirect Costs Notes : Indirect costs include the Staff Accountant, insurance premiums associated with field work and tool usage.	3.000	7900.000	YR	23,700.00	0.00	23,700.00

Project Cost Estimate for Grants and Cooperative Agreements Program - 2009/2010
Agency: San Bernardino National Forest Association
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	Line Item	Qty	Rate	UOM	Grant Request	Match	Total
Total Program Expenses					262,100.00	1,149,900.00	1,412,000.00
TOTAL DIRECT EXPENSES					262,100.00	1,149,900.00	1,412,000.00
TOTAL EXPENDITURES					262,100.00	1,149,900.00	1,412,000.00

Project Cost Summary for Grants and Cooperative Agreements Program - 2009/2010
Agency: San Bernardino National Forest Association
Application: Restoration (FINAL)

3/1/2010

	Line Item	Grant Request	Match	Total	Narrative
DIRECT EXPENSES					
Program Expenses					
1	Staff	196,500.00	1,149,900.00	1,346,400.00	<p>Project consists of a 3 year timeframe: July 2010 - June 2013. Staff Salary is allocated as follows:</p> <p>1 Program Director @ \$10,000/year = \$30,000 1 Program Manager @ \$35,000/year = \$105,000 1 Program Coordinator @ \$28,000/year - \$84,000 2 Interns/year @ \$5,000/each per year = \$30,000; \$15,000 is requested</p> <p>Matching Volunteer hours: 20,000 hours/year over 3 years = 60,000 hours @\$19.04/hour = 1,142,400.00</p>
2	Contracts	0.00	0.00	0.00	
3	Materials / Supplies	13,400.00	0.00	13,400.00	<p>Greenhouse Supplies: Soil, soil amendment, pots, potting supplies, gloves, hoses, irrigation, benches \$2,000/year for 3 years = \$6,000</p> <p>Signs: Volunteers Working Signage, directions to planting sites: \$1,000/year for 3 years = \$3,000</p> <p>Uniforms: Volunteer uniforms for restoration projects identification: \$2,000/year for 3 years = \$6,000</p> <p>GPS Units: Garmin GPSMAP 60CSx GPS - \$350 each x 4 units (one-time purchase) = \$1,400</p>

Project Cost Summary for Grants and Cooperative Agreements Program - 2009/2010
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					Print Costs: marketing, volunteer recruitment, program flyers \$2,000 for 3 years = \$6,000
4	Equipment Use Expenses	28,500.00	0.00	28,500.00	Mileage for staff: \$2,000 per year for 3 years = \$6,000 Fuel: fuel for (3) 14-passenger vans for transporting youth volunteers to work locations: \$7,500/year for 3 years = \$22,500
5	Equipment Purchases	0.00	0.00	0.00	
6	Others	0.00	0.00	0.00	
7	Indirect Costs	23,700.00	0.00	23,700.00	10% Administrative cost: \$9,700/year for 3 years = \$29,100
Total Program Expenses		262,100.00	1,149,900.00	1,412,000.00	
TOTAL DIRECT EXPENSES		262,100.00	1,149,900.00	1,412,000.00	
TOTAL EXPENDITURES		262,100.00	1,149,900.00	1,412,000.00	

Environmental Review Data Sheet (ERDS)

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ITEM 1 and ITEM 2

ITEM 1

- a. ITEM 1 - Has a CEQA Notice of Determination (NOD) been filed for the Project? ☐ Yes ☒ No
(Please select Yes or No)

ITEM 2

- b. Does the proposed Project include a request for funding for CEQA and/or NEPA document preparation prior to implementing the remaining Project Deliverables (i.e., is it a two-phased Project pursuant to Section 4970.06.1(b)) (Please select Yes or No) ☐ Yes ☒ No

ITEM 3 - Project under CEQA Guidelines Section 15378

- c. ITEM 3 - Are the proposed activities a "Project" under CEQA Guidelines Section 15378? ☐ Yes ☒ No
(Please select Yes or No)
- d. The Application is requesting funds solely for personnel and support to enforce OHV laws and ensure public safety. These activities would not cause any physical impacts on the environment and are thus not a "Project" under CEQA. (Please select Yes or No) ☐ Yes ☒ No
- e. Other. Explain why proposed activities would not cause any physical impacts on the environment and are thus not a "Project" under CEQA. DO NOT complete ITEMS 4 – 10
See San Bernardino National Forest's application. Reference ERDSs of Restoration projects (per Barbara Greenwood)
The 2009 Motorized Travel Environmental Assessment and Restoration Work Categorical Exclusions are attached for reference.

ITEM 4 - Impact of this Project on Wetlands

ITEM 5 - Cumulative Impacts of this Project

ITEM 6 - Soil Impacts

ITEM 7 - Damage to Scenic Resources

ITEM 8 - Hazardous Materials

Is the proposed Project Area located on a site included on any list compiled pursuant to Section 65962.5 of the California Government Code (hazardous materials)? (Please select Yes or No) ☐ Yes ☒ No

If YES, describe the location of the hazard relative to the Project site, the level of hazard and the measures to be taken to minimize or avoid the hazards.

ITEM 9 - Potential for Adverse Impacts to Historical or Cultural Resources

Would the proposed Project have potential for any substantial adverse impacts to historical or cultural resources? (Please select Yes or No) ☐ Yes ☒ No

Discuss the potential for the proposed Project to have any substantial adverse impacts to historical or cultural resources.

ITEM 10 - Indirect Significant Impacts

CEQA/NEPA Attachment

Attachments:

[SBNF Travel Management Environmental Assessment](#)
[Front Country Ranger District Categorical Exclusion](#)
[Mountaintop Ranger District Categorical Exclusion](#)

Evaluation Criteria

FOR OFFICE USE ONLY:

Version # _____

APP # 700581

1. Project Cost Estimate - Q 1. (Auto populates from Cost Estimate)

1. As calculated on the Project Cost Estimate, the percentage of the Project costs covered by the Applicant is: 10

(Note: This field will auto-populate once the Cost Estimate and Evaluation Criteria are Validated.) (Please select one from list)

- ☒ 76% or more (10 points)
☐ 51% - 75% (5 points)
☐ 26% - 50% (3 points)
☐ 25% (Match minimum) (No points)

2. Natural and Cultural Resources - Q 2.

2. Natural and Cultural Resources - Failure to fund the Project will result in adverse impacts to: 24

(Check all that apply) (Please select applicable values)

- ☒ Domestic water supply (4 points)
☐ Archeological and historical resources identified in the California Register of Historical Resources or the Federal Register of Historic Places (3 points)
☒ Stream or other watercourse (3 points)
☒ Soils - Site actively eroding (2 points)
☒ Sensitive areas (e.g., wilderness, riparian, wetlands, ACEC) (2 point each, up to a maximum of 6) Enter number of sensitive habitats [5]
☒ Threatened and Endangered (T&E) listed species (2 point each, up to a maximum of 6) Enter number of T&E species [12]
☒ Other special-status species- Number of special-status species (1 point each, up to a maximum of 3) Enter number of special-status species [20]

Describe the type and severity of impacts that might occur relative to the checked item(s):

Given that the SBNF encompasses high-desert to alpine environments, the concern of erosion and soil depletion is very real. By restoring damaged areas, riparian areas, streams, drainages and the domestic water supply will stay cleaner and less contaminated from erosion and runoff. With steep slopes and wildfire concerns, revegetating roads and slopes is critical to keep the soil in place. Also, if roads are eroded they could be closed if this presents a safety issue.

5 sensitive areas exist where restoration work will happen: Occupied Critical Carbonate Plants Habitat, Vernal Wetlands, meadows, pebble plains and riparian.

Lastly, 12 Threatened and Endangered Species and 20 Sensitive and Watch List species are in direct conflict with areas of illegal OHV use. If the roads are not adequately blocked and subsequently restored, these species could be greatly impacted.

3. Reason for Project - Q 3.

3. Reason for the Project 4

(Check the one most appropriate) (Please select one from list)

- ☐ Protect special-status species or cultural site (4 points)
☒ Restore natural resource system damaged by OHV activity (4 points)
☐ OHV activity in a closed area (3 points)

- ☐ Alternative measures attempted, but failed (2 points)
- ☐ Management decision (1 point)
- ☐ Scientific and cultural studies (1 point)
- ☐ Planning efforts associated with Restoration (1 point)

Reference Document

The SBNF assessed all motorized traffic routes on the forest in 2006, which resulted in a completed "Motorized Travel

Management Environmental Assessment" in 2008 which identified over 74 miles of unauthorized routes and trails to be restored, many bisecting sensitive cultural and biological resources. (See San Bernardino National Forest EA document). This EA is also available at the Forest Supervisor's Office and Big Bear Ranger Station, as well as online at: http://www.fs.fed.us/r5/sanbernardino/documents/travelmanagement_sbnf_final_ea.pdf

4. Measures to Ensure Success - Q 4.

4. Measures to ensure success –The Project makes use of the following elements to ensure successful implementation 12

(Check all that apply) Scoring: 2 points each (Please select applicable values)

- ☒ Site monitoring to prevent additional damage
- ☒ Construction of barriers and other traffic control devices
- ☒ Use of native plants and materials
- ☒ Incorporation of universally recognized 'Best Management Practices'
- ☒ Educational signage
- ☒ Identification of alternate OHV routes to ensure that OHV activities will not reoccur in restored area

Explain each item checked above:

Regular visits will be made to monitor the restoration sites.

Vertical mulching and barrier may be employed to reduce off-trail travel.

Native plants will be used in reforestation efforts to maintain the ecosystem.

Best Practices: Work follows US Forest Service methodology

Education signage regarding stewardship will be displayed.

Alternate OHV routes and information will be available through volunteers in the field, as well as on signs and at outposts.

5. Publicly Reviewed Plan - Q 5.

5. Is there a publicly reviewed and adopted plan (e.g., wilderness designation, land management plans, route designation decisions) that supports the need for the Restoration Project? 5

(Check the one most appropriate) (Please select one from list)

- ☐ No (No points) ☒ Yes (5 points)

Identify plan

USDA Forest Service San Bernardino National Forest Route Designation Plan; San Bernardino National Forest Land Management Plan; US Fish and Wildlife Motorized Travel Environmental Assessment.

6. Primary Funding Source - Q 6.

6. Primary funding source for future operational costs associated with the Project will be: 3

(Check the one most appropriate) (Please select one from list)

- ☐ Applicant's operational budget (5 points)
☒ Volunteer support and/or donations (3 points)
☐ Other Grant funding (2 points)
☐ OHV Trust Funds (No points)

If 'Operational budget' is checked, list reference document(s):

7. Public Input - Q 7.

7. The Project was developed with public input employing the following 2

(Check all that apply) Scoring: 1 point each, up to a maximum of 2 points (Please select applicable values)

- ☒ Publicly noticed meeting(s) with the general public to discuss Project (1 point)
☒ Conference call(s) with interested parties (1 point)
☒ Meeting(s) with stakeholders (1 point)

Explain each statement that was checked

Meetings with general public occur regularly at events, open houses, and in the field. Monthly volunteer meetings are open to the volunteers general public to discuss the project, schedule events, and answer questions. In addition, a public meeting is held at the beginning of each grant application period to allow the general public to make comments, ask questions, and give advice.

Conference calls amongst USDA Forest Service and SBNFA staff were held to determine priorities.

Meetings were held with SBNFA, USDA Forest Service, partners and volunteers to determine the appropriate courses of action for this project.

8. Utilization of Partnerships - Q 8.

8. The Project will utilize partnerships to successfully accomplish the Project. The number of partner organizations that will participate in the Project are 4

(Check the one most appropriate) (Please select one from list)

- ☒ 4 or more (4 points) ☐ 2 to 3 (2 points)
☐ 1 (1 point) ☐ None (No points)

List partner organization(s):

Treepeople, USDA Forest Service, Swinerton Foundation, Disney Worldwide Conservation Fund, Lighthouse Project, Sierra Club, Arrowhead Water, San Bernardino Country Housing and Urban Development.

9. Scientific and Cultural Studies - Q 9.

9. Scientific and cultural studies will 2

(Check all that apply) (Please select applicable values)

- ☒ Determine appropriate Restoration techniques (2 points)
☐ Examine potential effects of OHV Recreation on natural or cultural resources (2 points)
☐ Examine methods to ensure success of Restoration efforts (1 point)
☐ Lead to direct management action (1 point)

Explain each item checked above

Archaeological and Biological monitors will be staged at planting sites to ensure that Best Management Practices are followed. These staff are part of the San Bernardino National Forest.

10. Underlying Problem - Q 10.

10. The underlying problem that resulted in the need for the Restoration Project has been effectively addressed and resolved 3

(Check the one most appropriate) (Please select one from list)

☐ No (No points)

☒ Yes (3 points)

Explain 'Yes' answer

In the areas that will be restored over the 3-year period, OHV use should be minimized/stopped. Through techniques such as vertical mulching, ripping, planting, and signing, OHV activity will be significantly reduced. These areas include decommissioned roads and restoration of unauthorized routes.

11. Size of sensitive habitats - Q 11.

11. Size of sensitive habitats (e.g., wilderness, riparian, wetlands, ACEC) within the Project Area which will be restored 5

(Check the one most appropriate) (Please select one from list)

☒ Greater than 10 acres (5 points)

☐ 1 – 10 acres (3 points)

☐ Less than 1 acre (1 points)

☐ No sensitive habitat within Project Area (No points)